

WHAT IS CLAIMED IS:

1 1. A hydrogen absorbing alloy represented by the formula $\text{Ln}_{1-x}\text{Mg}_x\text{Ni}_{y-a}\text{Al}_a$ (where Ln is at least one element selected from rare
2 earth elements, $0.05 \leq x < 0.20$, $2.8 \leq y \leq 3.9$ and $0.10 \leq a \leq$
3 0.25).

1 2. The hydrogen absorbing alloy according to claim 1,
2 wherein Y is contained in the rare earth elements.

1 3. The hydrogen absorbing alloy according to claim 1,
2 further containing Zr.

1 4. The hydrogen absorbing alloy according to claim 2,
2 further containing Zr.

1 5. The hydrogen absorbing alloy according to claim 1,
2 wherein the alloy further comprises at least one element selected
3 from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn, In, Cu, Si, P and
4 B.

1 6. The hydrogen absorbing alloy according to claim 2,
2 wherein the alloy further comprises at least one element selected
3 from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn, In, Cu, Si, P and

4 B.

1 7. The hydrogen absorbing alloy according to claim 3,
2 wherein the alloy further comprises at least one element selected
3 from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn, In, Cu, Si, P and
4 B.

1 8. The hydrogen absorbing alloy according to claim 4,
2 wherein the alloy further comprises at least one element selected
3 from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn, In, Cu, Si, P and
4 B.

1 9. The hydrogen absorbing alloy according to claim 1,
2 wherein an average particle diameter of the alloy is in a range of
3 65 ~ 200 μm .

1 10. The hydrogen absorbing alloy according to claim 2,
2 wherein an average particle diameter of the alloy is in a range of
3 65 ~ 200 μm .

1 11. The hydrogen absorbing alloy according to claim 3,
2 wherein an average particle diameter of the alloy is in a range of
3 65 ~ 200 μm .

1 12. The hydrogen absorbing alloy according to claim 4,
2 wherein an average particle diameter of the alloy is in a range of
3 65 ~ 200 μm .

1 13. An alkaline storage battery comprising a positive
2 electrode, a negative electrode and an alkaline electrolyte,
3 wherein the negative electrode comprises a hydrogen absorbing alloy
4 represented by the formula $\text{Ln}_{1-x}\text{Mg}_x\text{Ni}_{y-a}\text{Al}_a$ (where Ln is at least one
5 element selected from rare earth elements, $0.05 \leq x < 0.20$, $2.8 \leq$
6 $y \leq 3.9$ and $0.10 \leq a \leq 0.25$).

1 14. The alkaline storage battery according to claim 13,
2 wherein Y is contained in the rare earth elements of the hydrogen
3 absorbing alloy.

1 15. The alkaline storage battery according to claim 13,
2 wherein the hydrogen absorbing alloy further contains Zr.

1 16. The alkaline storage battery according to claim 14,
2 wherein the hydrogen absorbing alloy further contains Zr.

1 17. The alkaline storage battery according to claim 13,
2 wherein the hydrogen absorbing alloy further comprises at least one
3 element selected from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn,

4 In, Cu, Si, P and B.

1 18. The alkaline storage battery according to claim 14,
2 wherein the hydrogen absorbing alloy further comprises at least one
3 element selected from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn,
4 In, Cu, Si, P and B.

1 19. The alkaline storage battery according to claim 15,
2 wherein the hydrogen absorbing alloy further comprises at least one
3 element selected from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn,
4 In, Cu, Si, P and B.

1 20. The alkaline storage battery according to claim 16,
2 wherein the hydrogen absorbing alloy further comprises at least one
3 element selected from V, Nb, Ta, Cr, Mo, Mn, Fe, Co, Ga, Zn, Sn,
4 In, Cu, Si, P and B.

1 21. The alkaline storage battery according to claim 13,
2 wherein an average particle diameter of the hydrogen absorbing
3 alloy is in a range of 65 ~ 200 μm .

1 22. The alkaline storage battery according to claim 14,
2 wherein an average particle diameter of the hydrogen absorbing
3 alloy is in a range of 65 ~ 200 μm .

1 23. The alkaline storage battery according to claim 15,
2 wherein an average particle diameter of the hydrogen absorbing
3 alloy is in a range of 65 ~ 200 μm .

1 24. The alkaline storage battery according to claim 16,
2 wherein an average particle diameter of the hydrogen absorbing
3 alloy is in a range of 65 ~ 200 μm .

1 25. The alkaline storage battery according to claim 13,
2 wherein the amount of the alkaline electrolyte is 0.31 ml or less
3 per 1g of the hydrogen absorbing alloy.